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October 26, 2018

VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, South Carolina 29210

Re: **Duke Energy Progress, LLC – Monthly Power Plant Performance
Report
Docket No. 2006-224-E**

Dear Ms. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is the Monthly Power Plant Performance Report in Docket No. 2006-224-E for the month of September 2018.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803.988.7130.

Sincerely,

Rebecca J. Dulin

Enclosure

cc: Ms. Dawn Hipp, Office of Regulatory Staff
Mr. Jeffrey M. Nelson, Office of Regulatory Staff
Ms. Nanette Edwards, Office of Regulatory Staff
Michael Seaman-Huynh, Office of Regulatory Staff
Ms. Heather Shirley Smith, Duke Energy
Mr. Scott Elliott, Elliott & Elliott, P.A.
Mr. Garrett Stone, Brickfield, Burchette, Ritts & Stone, PC
Mr. Gary Walsh, Walsh Consulting, LLC

Duke Energy Progress
Base Load Power Plant Performance Review Plan

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Period: September, 2018

Station	Unit	Date of Outage	Duration of Outage	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
Brunswick	1	09/13/2018 - 09/22/2018	211.42	Unscheduled	Reactor shutdown for Hurricane Florence	Reactor shutdown for Hurricane Florence	Following exit of emergency plan and validated access/egress paths for station personnel, gained concurrence with NRC and FEMA for restart
	2	09/14/2018 - 09/20/2018	152.05	Unscheduled	Reactor shutdown for Hurricane Florence	Reactor shutdown for Hurricane Florence	Following exit of emergency plan and validated access/egress paths for station personnel, gained concurrence with NRC and FEMA for restart
Harris	1	None					
Robinson	2	09/22/2018 - 10/01/2018	213.90	Scheduled	End-of-cycle 31 refueling outage (R231)	Planned refueling outage	Completed refueling outage

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
September 2018**

Lee Energy Complex

No Outages at Baseload Units During the Month.

Richmond County Station

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
7	9/15/2018 6:20:00 PM To 9/15/2018 8:34:00 PM	Unsch	5041	Gas Turbine - Fuel Piping And Valves	P2 vent failed open during operation.	
8	9/19/2018 10:56:00 AM To 9/19/2018 3:08:00 PM	Unsch	5048	Gas Fuel System with controls and instruments	UNIT TRIPPED TO BAD HAZGAS SENSORS	

Sutton Energy Complex

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
1A	9/21/2018 12:23:00 AM To 10/15/2018 5:05:00 PM	Unsch	9000	Flood	Plant shutdown due to post hurricane flooding	
1B	9/21/2018 12:23:00 AM To 10/15/2018 3:36:00 PM	Unsch	9000	Flood	Plant shutdown due to post hurricane flooding	
ST1	9/12/2018 12:13:00 AM To 9/17/2018 1:45:00 PM	Unsch	9035	Hurricane	Management decision to retire steam turbine prior to hurricane Florence	
ST1	9/21/2018 12:16:00 AM To 10/1/2018 12:00:00 AM	Unsch	9000	Flood	Plant shutdown due to post hurricane flooding	

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Base Load Power Plant Performance Review Plan**

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**September 2018
Brunswick Nuclear Station**

	<u>Unit 1</u>	<u>Unit 2</u>		
(A) MDC (mW)	938	932		
(B) Period Hours	720	720		
(C) Net Gen (mWh) and Capacity Factor (%)	439,010	65.00	467,910	69.73
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00	9,915	1.48
(F) Net mWh Not Gen due to Full Forced Outages	198,309	29.36	141,711	21.12
* (G) Net mWh Not Gen due to Partial Forced Outages	38,041	5.64	51,504	7.67
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	675,360	100.00%	671,040	100.00%
(K) Equivalent Availability (%)		70.60		77.40
(L) Output Factor (%)		92.03		88.40
(M) Heat Rate (BTU/NkWh)		10,533		10,972

* Estimate
FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress
Base Load Power Plant Performance Review Plan**

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**September 2018
Harris Nuclear Station**

Unit 1

(A) MDC (mW)	932	
(B) Period Hours	720	
(C) Net Gen (mWh) and Capacity Factor (%)	701,214	104.50
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-30,174	-4.50
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	671,040	100.00%
(K) Equivalent Availability (%)		100.00
(L) Output Factor (%)		104.50
(M) Heat Rate (BTU/NkWh)		10,327

* Estimate

FOOTNOTE: D and F Include Ramping Losses

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**Duke Energy Progress
Base Load Power Plant Performance Review Plan**

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**September 2018
Robinson Nuclear Station**

Unit 2

(A) MDC (mW)	741	
(B) Period Hours	720	
(C) Net Gen (mWh) and Capacity Factor (%)	371,425	69.62
(D) Net mWh Not Gen due to Full Schedule Outages	158,500	29.71
* (E) Net mWh Not Gen due to Partial Scheduled Outages	3,595	0.67
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	0	0.00
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	533,520	100.00%
(K) Equivalent Availability (%)		69.75
(L) Output Factor (%)		99.04
(M) Heat Rate (BTU/NkWh)		10,915

* Estimate
FOOTNOTE: D and F Include Ramping Losses

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**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
September 2018**

Lee Energy Complex

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	227	228	379	1,059
(B) Period Hrs	720	720	720	720	720
(C) Net Generation (mWh)	112,306	111,197	113,021	240,081	576,605
(D) Capacity Factor (%)	69.32	68.04	68.85	87.98	75.62
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	39,600	41,040	41,760	720	123,120
(H) Scheduled Derates: percent of Period Hrs	24.44	25.11	25.44	0.26	16.15
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	10,094	11,203	9,379	32,079	62,755
(N) Economic Dispatch: percent of Period Hrs	6.23	6.85	5.71	11.76	8.23
(O) Net mWh Possible in Period	162,000	163,440	164,160	272,880	762,480
(P) Equivalent Availability (%)	75.56	74.89	74.56	99.74	83.85
(Q) Output Factor (%)	69.32	68.04	68.85	87.98	75.62
(R) Heat Rate (BTU/NkWh)	9,344	9,440	9,339	4,660	7,411

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
September 2018**

Richmond County Station

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	189	189	175	553
(B) Period Hrs	720	720	720	720
(C) Net Generation (mWh)	106,977	107,074	124,389	338,440
(D) Capacity Factor (%)	78.61	78.68	98.72	85.00
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	25,122	25,769	4,320	55,211
(H) Scheduled Derates: percent of Period Hrs	18.46	18.94	3.43	13.87
(I) Net mWh Not Generated due to Full Forced Outages	422	794	0	1,216
(J) Forced Outages: percent of Period Hrs	0.31	0.58	0.00	0.31
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	583	583
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.46	0.15
(M) Net mWh Not Generated due to Economic Dispatch	3,559	2,443	0	6,002
(N) Economic Dispatch: percent of Period Hrs	2.62	1.80	0.00	1.51
(O) Net mWh Possible in Period	136,080	136,080	126,000	398,160
(P) Equivalent Availability (%)	81.23	80.48	96.11	85.68
(Q) Output Factor (%)	78.90	79.15	98.72	85.28
(R) Heat Rate (BTU/NkWh)	11,715	11,292	0	7,276

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
September 2018**

Richmond County Station

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	216	216	248	680
(B) Period Hrs	720	720	720	720
(C) Net Generation (mWh)	124,009	125,787	174,289	424,085
(D) Capacity Factor (%)	79.74	80.88	97.61	86.62
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	30,240	29,520	0	59,760
(H) Scheduled Derates: percent of Period Hrs	19.44	18.98	0.00	12.21
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	1,271	213	4,271	5,755
(N) Economic Dispatch: percent of Period Hrs	0.82	0.14	2.39	1.18
(O) Net mWh Possible in Period	155,520	155,520	178,560	489,600
(P) Equivalent Availability (%)	80.56	81.02	100.00	87.79
(Q) Output Factor (%)	79.74	80.88	97.61	86.62
(R) Heat Rate (BTU/NkWh)	11,444	11,225	0	6,676

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
September 2018**

Sutton Energy Complex

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	271	719
(B) Period Hrs	720	720	720	720
(C) Net Generation (mWh)	81,671	82,075	78,417	242,163
(D) Capacity Factor (%)	50.64	50.89	40.19	46.78
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	25,941	25,461	1,734	53,135
(H) Scheduled Derates: percent of Period Hrs	16.08	15.79	0.89	10.26
(I) Net mWh Not Generated due to Full Forced Outages	53,674	53,674	101,155	208,504
(J) Forced Outages: percent of Period Hrs	33.28	33.28	51.84	40.28
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	1,768	1,768
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.91	0.34
(M) Net mWh Not Generated due to Economic Dispatch	0	70	12,046	12,116
(N) Economic Dispatch: percent of Period Hrs	0.00	0.04	6.17	2.34
(O) Net mWh Possible in Period	161,280	161,280	195,120	517,680
(P) Equivalent Availability (%)	50.64	50.93	46.36	49.12
(Q) Output Factor (%)	76.10	76.49	83.45	78.47
(R) Heat Rate (BTU/NkWh)	11,347	11,282	0	7,651

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Intermediate Power Plant Performance
Review Plan
September 2018**

Mayo Station

Unit 1

(A)	MDC (mW)	746
(B)	Period Hrs	720
(C)	Net Generation (mWh)	49,277
(D)	Net mWh Possible in Period	537,120
(E)	Equivalent Availability (%)	19.63
(F)	Output Factor (%)	39.28
(G)	Capacity Factor (%)	9.17

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Intermediate Power Plant Performance
Review Plan
September 2018**

Roxboro Station

	Unit 2	Unit 3	Unit 4
(A) MDC (mW)	673	698	711
(B) Period Hrs	720	720	720
(C) Net Generation (mWh)	177,199	-1,836	225,126
(D) Net mWh Possible in Period	484,560	502,560	511,920
(E) Equivalent Availability (%)	99.26	0.26	84.99
(F) Output Factor (%)	36.57	0.00	50.80
(G) Capacity Factor (%)	36.57	0.00	43.98

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Base Load Power Plant Performance Review Plan

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October 2017 - September 2018
Brunswick Nuclear Station

	<u>Unit 1</u>	<u>Unit 2</u>		
(A) MDC (mW)	938	932		
(B) Period Hours	8760	8760		
(C) Net Gen (mWh) and Capacity Factor (%)	7,071,990	86.07	7,588,647	92.95
(D) Net mWh Not Gen due to Full Schedule Outages	733,172	8.92	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	113,215	1.38	45,563	0.56
(F) Net mWh Not Gen due to Full Forced Outages	256,700	3.12	285,985	3.50
* (G) Net mWh Not Gen due to Partial Forced Outages	41,803	0.51	244,125	2.99
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	8,216,880	100.00%	8,164,320	100.00%
(K) Equivalent Availability (%)		86.61		93.82
(L) Output Factor (%)		97.86		96.32
(M) Heat Rate (BTU/NkWh)		10,455		10,764

* Estimate

FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

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October 2017 - September 2018
Harris Nuclear Station

Unit 1

(A) MDC (mW)	932	
(B) Period Hours	8760	
(C) Net Gen (mWh) and Capacity Factor (%)	7,364,552	90.30
(D) Net mWh Not Gen due to Full Schedule Outages	756,318	9.27
* (E) Net mWh Not Gen due to Partial Scheduled Outages	110,488	1.35
(F) Net mWh Not Gen due to Full Forced Outages	146,239	1.79
* (G) Net mWh Not Gen due to Partial Forced Outages	-222,113	-2.71
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	8,155,484	100.00%
(K) Equivalent Availability (%)		87.24
(L) Output Factor (%)		101.53
(M) Heat Rate (BTU/NkWh)		10,485

* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress
Base Load Power Plant Performance Review Plan**

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**October 2017 - September 2018
Robinson Nuclear Station**

Unit 2

(A) MDC (mW)	741	
(B) Period Hours	8760	
(C) Net Gen (mWh) and Capacity Factor (%)	6,418,845	98.89
(D) Net mWh Not Gen due to Full Schedule Outages	288,422	4.44
* (E) Net mWh Not Gen due to Partial Scheduled Outages	28,158	0.43
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-244,265	-3.76
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	6,491,160	100.00%
(K) Equivalent Availability (%)		95.23
(L) Output Factor (%)		103.48
(M) Heat Rate (BTU/NkWh)		10,385

* Estimate
FOOTNOTE: D and F Include Ramping Losses

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**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
October, 2017 through September, 2018**

Lee Energy Complex

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	226	227	379	1,056
(B) Period Hrs	8,760	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,432,250	1,438,083	1,485,134	2,857,440	7,212,907
(D) Capacity Factor (%)	72.83	72.72	74.77	86.07	77.97
(E) Net mWh Not Generated due to Full Scheduled Outages	109,461	103,387	74,054	132,069	418,972
(F) Scheduled Outages: percent of Period Hrs	5.57	5.23	3.73	3.98	4.53
(G) Net mWh Not Generated due to Partial Scheduled Outages	265,418	276,050	284,439	57,807	883,714
(H) Scheduled Derates: percent of Period Hrs	13.50	13.96	14.32	1.74	9.55
(I) Net mWh Not Generated due to Full Forced Outages	9,577	4,147	3,089	17,030	33,842
(J) Forced Outages: percent of Period Hrs	0.49	0.21	0.16	0.51	0.37
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	10,247	10,247
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.31	0.11
(M) Net mWh Not Generated due to Economic Dispatch	149,876	155,808	139,519	245,447	690,650
(N) Economic Dispatch: percent of Period Hrs	7.62	7.88	7.02	7.39	7.47
(O) Net mWh Possible in Period	1,966,582	1,977,475	1,986,235	3,320,040	9,250,332
(P) Equivalent Availability (%)	80.46	80.64	81.85	93.46	85.44
(Q) Output Factor (%)	78.05	77.30	78.10	90.47	82.38
(R) Heat Rate (BTU/NkWh)	9,089	9,144	9,034	4,465	7,257

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
October, 2017 through September, 2018**

Richmond County Station

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	189	189	175	553
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,242,497	1,235,874	1,388,744	3,867,115
(D) Capacity Factor (%)	75.05	74.65	90.59	79.83
(E) Net mWh Not Generated due to Full Scheduled Outages	124,472	124,557	116,973	366,002
(F) Scheduled Outages: percent of Period Hrs	7.52	7.52	7.63	7.56
(G) Net mWh Not Generated due to Partial Scheduled Outages	168,157	172,724	28,798	369,679
(H) Scheduled Derates: percent of Period Hrs	10.16	10.43	1.88	7.63
(I) Net mWh Not Generated due to Full Forced Outages	422	2,454	747	3,623
(J) Forced Outages: percent of Period Hrs	0.03	0.15	0.05	0.07
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	583	583
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.04	0.01
(M) Net mWh Not Generated due to Economic Dispatch	120,092	120,031	0	237,278
(N) Economic Dispatch: percent of Period Hrs	7.25	7.25	0.00	4.90
(O) Net mWh Possible in Period	1,655,640	1,655,640	1,533,000	4,844,280
(P) Equivalent Availability (%)	82.30	81.90	90.40	84.73
(Q) Output Factor (%)	81.37	81.30	98.45	86.75
(R) Heat Rate (BTU/NkWh)	11,352	11,124	0	7,202

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
October, 2017 through September, 2018**

Richmond County Station

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	216	216	248	679
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,409,203	1,429,083	1,875,818	4,714,104
(D) Capacity Factor (%)	74.65	75.70	86.34	79.26
(E) Net mWh Not Generated due to Full Scheduled Outages	174,729	173,853	206,807	555,389
(F) Scheduled Outages: percent of Period Hrs	9.26	9.21	9.52	9.34
(G) Net mWh Not Generated due to Partial Scheduled Outages	195,830	192,843	2,624	391,297
(H) Scheduled Derates: percent of Period Hrs	10.37	10.22	0.12	6.58
(I) Net mWh Not Generated due to Full Forced Outages	16,755	277	0	17,032
(J) Forced Outages: percent of Period Hrs	0.89	0.01	0.00	0.29
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	1,582	1,582
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.07	0.03
(M) Net mWh Not Generated due to Economic Dispatch	91,225	91,685	85,648	268,559
(N) Economic Dispatch: percent of Period Hrs	4.83	4.86	3.94	4.52
(O) Net mWh Possible in Period	1,887,742	1,887,742	2,172,480	5,947,964
(P) Equivalent Availability (%)	79.48	80.56	90.29	83.77
(Q) Output Factor (%)	83.67	83.47	95.43	87.92
(R) Heat Rate (BTU/NkWh)	11,336	11,322	0	6,821

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
October, 2017 through September, 2018**

Sutton Energy Complex

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	270	719
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,291,947	1,312,551	1,559,969	4,164,467
(D) Capacity Factor (%)	65.77	66.82	65.96	66.17
(E) Net mWh Not Generated due to Full Scheduled Outages	246,099	211,716	285,601	743,415
(F) Scheduled Outages: percent of Period Hrs	12.53	10.78	12.08	11.81
(G) Net mWh Not Generated due to Partial Scheduled Outages	231,168	220,834	64,261	516,263
(H) Scheduled Derates: percent of Period Hrs	11.77	11.24	2.72	8.20
(I) Net mWh Not Generated due to Full Forced Outages	53,712	86,021	105,103	244,835
(J) Forced Outages: percent of Period Hrs	2.73	4.38	4.44	3.89
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	16,823	16,823
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.71	0.27
(M) Net mWh Not Generated due to Economic Dispatch	141,524	133,328	333,367	608,219
(N) Economic Dispatch: percent of Period Hrs	7.20	6.79	14.10	9.66
(O) Net mWh Possible in Period	1,964,449	1,964,449	2,365,124	6,294,022
(P) Equivalent Availability (%)	72.95	73.59	80.09	75.83
(Q) Output Factor (%)	78.86	79.63	79.07	79.18
(R) Heat Rate (BTU/NkWh)	11,446	11,374	0	7,136

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress
Intermediate Power Plant
Performance Review Plan
October, 2017 through September, 2018**

Mayo Station

Units	Unit 1
(A) MDC (mW)	746
(B) Period Hrs	8,760
(C) Net Generation (mWh)	1,502,917
(D) Net mWh Possible in Period	6,534,960
(E) Equivalent Availability (%)	84.32
(F) Output Factor (%)	41.01
(G) Capacity Factor (%)	23.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Intermediate Power Plant
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October, 2017 through September, 2018**

Roxboro Station

Units	Unit 2	Unit 3	Unit 4
(A) MDC (mW)	673	698	711
(B) Period Hrs	8,760	8,760	8,760
(C) Net Generation (mWh)	1,848,346	1,833,144	1,579,673
(D) Net mWh Possible in Period	5,895,480	6,114,480	6,228,360
(E) Equivalent Availability (%)	78.61	72.11	52.05
(F) Output Factor (%)	52.05	50.86	56.36
(G) Capacity Factor (%)	31.35	29.98	25.36

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Outages for 100 mW or Larger Units
September, 2018

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<u>Unit Name</u>	<u>Capacity Rating (mW)</u>	<u>Full Outage Hours</u>		<u>Total</u>
		<u>Scheduled</u>	<u>Unscheduled</u>	
Brunswick 1	938	0.00	0.00	0.00
Brunswick 2	932	0.00	0.00	0.00
Harris 1	932	0.00	0.00	0.00
Robinson 2	741	213.90	0.00	213.90

Duke Energy Progress
Outages for 100 mW or Larger Units
September 2018

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Asheville Steam 1	192	0.00	0.00	0.00
Asheville Steam 2	192	0.00	0.00	0.00
Asheville CT 3	185	720.00	0.00	720.00
Asheville CT 4	185	720.00	0.00	720.00
Darlington CT 12	133	227.00	2.38	229.38
Darlington CT 13	133	58.50	4.43	62.93
Lee Energy Complex CC 1A	225	0.00	0.00	0.00
Lee Energy Complex CC 1B	227	0.00	0.00	0.00
Lee Energy Complex CC 1C	228	0.00	0.00	0.00
Lee Energy Complex CC ST1	379	0.00	0.00	0.00
Mayo Steam 1	746	551.83	0.00	551.83
Richmond County CT 1	189	0.00	0.00	0.00
Richmond County CT 2	187	16.52	0.00	16.52
Richmond County CT 3	185	2.68	0.00	2.68
Richmond County CT 4	186	720.00	0.00	720.00
Richmond County CT 6	187	1.63	0.00	1.63
Richmond County CC 7	189	0.00	2.23	2.23
Richmond County CC 8	189	0.00	4.20	4.20
Richmond County CC ST4	175	0.00	0.00	0.00
Richmond County CC 9	216	0.00	0.00	0.00
Richmond County CC 10	216	0.00	0.00	0.00
Richmond County CC ST5	248	0.00	0.00	0.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Outages for 100 mW or Larger Units
September 2018

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Roxboro Steam 1	380	83.50	0.00	83.50
Roxboro Steam 2	673	0.00	0.00	0.00
Roxboro Steam 3	698	718.15	0.00	718.15
Roxboro Steam 4	711	96.65	0.00	96.65
Sutton Energy Complex CC 1A	224	0.00	239.62	239.62
Sutton Energy Complex CC 1B	224	0.00	239.62	239.62
Sutton Energy Complex CC ST1	271	0.00	373.27	373.27
Wayne County CT 10	192	129.00	0.00	129.00
Wayne County CT 11	192	0.00	0.00	0.00
Wayne County CT 12	193	174.50	0.00	174.50
Wayne County CT 13	191	0.00	0.00	0.00
Wayne County CT 14	195	0.00	0.00	0.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.